

REMARKS

This is intended as a full and complete response to the Office Action dated December 10, 2003, having a shortened statutory period for response set to expire on March 10, 2004. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-13, 15-29, and 31-36 remain pending in the application and are shown above. Claims 4-9, 11-18, and 30 have been cancelled by Applicant. Claims 1-3, 10, 19-29, and 33-36 are rejected; claims 4-9, 11-13, and 15-18 are objected to; and claims 31 and 32 are indicated to be allowable by the Examiner. Applicant has added new claims 37-58 and amended claims 1, 10, 21-22, and 29. Reconsideration of the rejected claims is requested for reasons presented below.

Claims 1-3, 19, 22-23, 29, 33 and 35-36 stand rejected under 35 U.S.C. § 102(e) as being anticipated by *Lembcke et al.* (U.S. Patent No. 6,173,788 B1). The Examiner states that *Lembcke et al.* discloses a packer P that envelopes a control line 16 as it expands against a casing or wellbore. The Examiner further states that *Lembcke et al.* discloses a groove or recess 14 in its outer wall which serves as a housing for the control line 16.

Applicant respectfully traverses the rejection to claims 1-3, 19, 33, and 35-36. *Lembcke et al.* teaches expanding a sealing element 12 into casing 10 by compressing the sealing element 12. Upon expansion, the sealing element 12 of *Lembcke et al.* envelopes a groove 14 and surfaces 18 and 20 connect. See col. 2, lns. 58-60 and Figure 2. According to *Lembcke et al.*, a control line 16 may run through the groove 14.

As shown in Figures 1-2 and in Figures 1a-2a of *Lembcke et al.*, the groove 14 remains in the same position before and after expansion. The sealing element 12 merely surrounds the groove 14 by connecting the surfaces 18 and 20 of the sealing element 12 upon expansion. See *Lembcke et al.*, col. 3, lns. 7-9. As seen in Figures 1-2 and 1a-2a of *Lembcke et al.*, the groove 14 does not move outward radially upon expansion of the sealing element 12. Therefore, *Lembcke et al.* does not teach, show, or suggest an expandable tubular comprising an outer wall having a recess formed therein, the recess defining a housing for one or more of the following during expansion of the expandable tubular: control lines, instrumentation lines, fiber optics, and

downhole sensors, wherein the recess moves outward radially upon expansion of the expandable tubular, as recited in claim 1 and its dependent claims 2-3, 19, 33, and 35-36. Applicant therefore respectfully requests removal of the rejection to and allowance of claims 1-3, 19, 33, and 35-36.

Applicant further respectfully traverses the rejection to claims 22-23. As shown in Figures 1-2 and 1a-2a of *Lembcke et al.*, the outer wall of the sealing element 12 expands to the casing 10 and increases in diameter with respect to its original diameter prior to expansion (see particularly Figure 2), but the inner wall of the sealing element 12 does not increase in diameter during the expansion process. Rather, the inner wall of the sealing element 12 of *Lembcke et al.* remains the same diameter throughout the expansion process. Therefore, *Lembcke et al.* does not teach, show, or suggest an apparatus for use in well completion operations, comprising an expandable tubular having inner and outer walls, and one or more of the following located within the outer wall of the expandable tubular: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein the one or more of the following located within the outer wall of the expandable tubular is protected during the expansion process when the inner wall increases in diameter, as recited in claim 22 and its dependent claim 23. Applicant accordingly respectfully requests removal of the rejection to and allowance of claims 22-23.

Applicant respectfully traverses the rejection to claim 29. As shown in Figures 1-2 and 1a-2a as well as described in the specification of *Lembcke et al.*, the inner diameter of the sealing element 12 does not increase during expansion. Instead, the sealing element 12 merely surrounds the groove 14 by connecting the surfaces 18 and 20 of the sealing element 12 upon expansion. See *Lembcke et al.*, col. 3, lns. 7-9. As such, *Lembcke et al.* does not teach, show, or suggest a method for controlling at least one downhole tool or instrument through an expandable tubular from a surface of a wellbore comprising providing the expandable tubular in the wellbore, the expandable tubular having a first inner diameter, one or more of the following disposable within a recess formed in an outer wall of the expandable tubular: control lines, instrumentation lines, fiber optics, downhole sensors, data acquisition lines, and communication lines; and expanding the expandable tubular to a second inner diameter, the second inner diameter larger than the first inner diameter, wherein the one or more of the control

lines, instrumentation lines, fiber optics, and downhole sensors is protected during the expansion, as recited in claim 29.

Claims 10, 20-21, 24-28 and 34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Lembcke et al.* in view of *Evans et al.* (U.S. Patent No. 3,844,345). The Examiner states that *Lembcke et al.* does not disclose an encapsulation within the groove 14 that possesses first and second walls, wherein at least one of the walls is arcuate. The Examiner then uses *Evans et al.* to teach an encapsulation A containing a sheath or housing 14 of elastomeric material for control lines capable of withstanding excessive radial expansion forces, the encapsulation A having a first arcuate wall and a second wall connected to form the housing 14. The Examiner then combines the groove 14 of *Lembcke et al.* with the encapsulation E of *Evans et al.*, stating that it would be obvious to one of ordinary skill in the art to modify the packer of *Lembcke et al.* to accommodate the encapsulation of *Evans et al.* to protect against fluid infiltration of fluids and control line failure due to excessive expansion force.

Applicant respectfully traverses the rejection to claims 10, 20-21, and 34. As stated above in relation to claim 1, the claim from which claims 10, 20-21, and 34 depend, *Lembcke et al.* does not teach, show, or suggest an expandable tubular comprising an outer wall having a recess formed therein, wherein the recess moves outward radially upon expansion of the expandable tubular. Additionally, *Evans et al.* does not teach, show, or suggest an expandable tubular comprising an outer wall having a recess formed therein, wherein the recess moves outward radially upon expansion of the expandable tubular, as recited in claims 10, 20-21, and 34. *Evans et al.* discloses a sheath 14 disposed on production tubing B. See Figures 1-2. The only expandable element shown or described in *Evans et al.* is a packer E of a blowout preventer M, which may be pressed into engagement with the outside surface 21 of the production tubing B and the outside surface 15 of the sheath 14 to provide a seal against fluid escaping during a possible kick or blowout. See Figure 4 and col. 3, lns. 49-67. Therefore, in *Evans et al.*, the sheath 14 does not move during expansion of the packer E; rather, the sheath 14 remains stationary while the packer expands toward the sheath 14. Accordingly, *Lembcke et al.*, alone or in combination with *Evans et al.* does not teach, show, or suggest an expandable tubular comprising an outer wall having a

recess formed therein, the recess defining a housing for one or more of the following during expansion of the expandable tubular: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein the recess moves outward radially upon expansion of the expandable tubular, as recited in claims 10, 20-21, and 34. Applicant therefore respectfully requests removal of the rejection to and allowance of claims 10, 20-21, and 34.

Applicant respectfully traverses the rejection to claims 24-28. Because claims 24-28 depend from claim 22, the discussion above as to the rejection to claim 22 under *Lembcke et al.* applies equally to claims 24-28. Moreover, *Evans et al.* does not disclose an apparatus for use in well completion operations comprising an expandable tubular having inner and outer walls, wherein one or more of the following located within the outer wall of the expandable tubular is protected during the expansion process when the inner wall increases in diameter, as recited in claims 24-28. As stated above, the packer E of the blowout prevent M is the only expandable element disclosed within *Evans et al.* The packer E expands radially inward from the wellbore W toward the production tubing B to seal around the production tubing B and the sheath 14; therefore, the packer E decreases in diameter upon expansion. See col. 3 ln. 49 to col. 4 ln. 2. Thus, *Lembcke et al.*, alone or combination with *Evans et al.*, does not teach, show, or suggest an apparatus for use in well completion operations, comprising an expandable tubular having inner and outer walls, and one or more of the following located within the outer wall of the expandable tubular: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein the one or more of the following located within the outer wall of the expandable tubular is protected during the expansion process when the inner wall increases in diameter, as recited in claims 24-28. Applicant respectfully requests removal of the rejection to and allowance of claims 24-28.

Claims 4-9, 11-13, and 15-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has rewritten claims 4-6 and 9 as new claims 37-40 and has rewritten claims 7-8, 11-13, and 15-18 with minor modifications as new claims 41-49. Applicant therefore requests allowance of claims 37-49.

Applicant has added new claims 50-58. Applicant respectfully submits that *Lembcke et al.*, alone or in combination with *Evans et al.*, does not teach, show, or suggest an expandable tubular comprising an outer wall having a recess formed therein, the recess defining a housing for one or more of the following during expansion of the expandable tubular: control lines, instrumentation lines, fiber optics, and downhole sensors, wherein a thickness of a wall of the expandable tubular decreases upon expansion, as recited in new claim 50 and its dependent claims 51-55. Additionally, Applicant respectfully submits that *Lembcke et al.*, alone or in combination with *Evans et al.*, does not teach, show, or suggest a method for controlling at least one downhole tool or instrument through an expandable tubular from a surface of a wellbore comprising providing the expandable tubular in the wellbore, one or more of the following disposable within a recess formed in a wall of the expandable tubular: control lines, instrumentation lines, fiber optics, downhole sensors, data acquisition lines, and communication lines, and expanding the expandable tubular, thereby decreasing a thickness of the wall of the expandable tubular, wherein the one or more of the control lines, instrumentation lines, fiber optics, and downhole sensors is protected during the expansion, as recited in claim 56 and its dependent claims 57-58. Applicant therefore respectfully requests allowance of claims 50-58.

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicant respectfully submits that the claims are in condition for allowance and respectfully requests allowance of the claims.

Respectfully submitted,



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